Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (original) A level shifter comprising:

a pair of current mirrors that are configured to couple an input signal from a first system to a common output node (Vout) in a second system that is isolated from the first system; and

a pair of diodes that are configured to decouple one of the pair of current mirrors from the input signal if a fault occurs.

2.   (currently amended) The level shifter of claim 1, wherein the pair of current mirrors comprise transistors that are ~~each of the same~~ all of a same channel-type.

3.   (original) The level shifter of claim 1, wherein the pair of diodes are further configured to split current from the input signal to provide substantially half the current to each of the pair of current mirrors when the fault does not occur.

4.   (original) The level shifter of claim 1, wherein a first current mirror of the pair of current mirrors is supplied by a first reference voltage of the first system, and a second current mirror of the pair of current mirrors is supplied by a second reference voltage of the second system.

5.   (original) The level shifter of claim 4, further comprising a third diode (D3) that is configured to decouple the first current mirror from the common output node if the fault occurs.

6.   (original) The level shifter claim 1, further including a current generator is configured to provide a compensation current between the first system and the second system, to minimize a net current flow between the first system and the second system.

7.   (original) The level shifter claim 1, further including a voltage source that is configured to provide bias between the first system and the second system to minimize switching transients.

8.   (original) A level shifter for coupling an input signal in from a first system to an output node in a second system that is isolated from the first system, comprising:

        a current mirror that is configured to mirror current corresponding to the input signal to a load at the output node, and

        a pair of diodes that are configured to select a reference voltage from one of the first system and the second system to provide a net current to the current mirror.

9.   (original) The level shifter of claim 8, further including:

        at least one other current mirror that is configured to mirror the current corresponding to the input signal to at least one other load in at least one other system; and

        at least one other diode, operably coupled to the pair of diodes to form a diode network that is configured to select the reference voltage from one of the first system, the second system, and the at least one other system, to provide the net current to the current mirror.

10.   (original) The level shifter of claim 8, further including: a second current mirror that is configured to mirror another current corresponding to an input from the second system to an other load in the first system.

11. (original) The level shifter of claim 8, wherein the current mirror comprises P-channel transistors, a first diode of the pair of diodes is arranged in series between a first supply voltage of the first system and the current mirror, and a second diode of the pair of diodes is arranged in series between a second supply voltage of the second system and the current mirror, so that the reference voltage corresponds to whichever of the first supply voltage and the second supply voltage is at a higher potential.

12. (original) The level shifter of claim 8, wherein the current mirror comprises N-channel transistors, a first diode of the pair of diodes is arranged in series between the current mirror and a first ground voltage of the first system, and a second diode of the pair of diodes is arranged in series between the current mirror and a second ground voltage of the second system, so that the reference voltage corresponds to whichever of the first ground voltage and the second ground voltage is at a lower potential.

13. (original) The level shifter of claim 8, further including a second current mirror that is configured to mirror a second current corresponding to an inversion of the input signal to provide a differential output in the second reference system.

14. (original) The level shifter claim 8, further including one or more bias transistors that is configured to provide a bias current to the current mirror to enhance a switching speed of the current mirror.

15. (original) The level shifter of claim 8, further including cascade transistors corresponding to each transistor in the current mirror.

16. (currently amended) The level shifter of claim 15, further including one or more current-injecting transistors that is configured to reduce ~~the effects~~ effects of gate-drain capacitance associated with one or more of the cascade transistors.

17.   (currently amended) The level shifter claim 15, further including one or more isolation transistors that is configured to decouple ~~the effects~~ effects of gate-drain capacitance associated with one or more of the cascade transistors from the input signal.

18.   (original) The level shifter of claim 8, further including a current generator that is configured to provide a compensation current between the first system and the second system, to substantially minimize a net current flow between the first system and the second system.

19.   (original) A method of coupling an input signal from a first system to a common output node in a second system that is isolated from the first system, comprising:
        coupling the input signal to the common output node via a pair of current mirrors; and
        providing a pair of diodes that are configured to decouple one of the pair of current mirrors from the input signal if a fault occurs.

20.   (currently amended) A method of coupling an input signal from a first system to a common output node in a second system, wherein the first system and the second system have independent grounds systems by using a level shifter characterized by the steps:
        mirroring current corresponding to the input signal to a load at the <u>common</u> output node via a current mirror in the level shifter, and
        selecting a reference voltage from one of the first system and the second system via a pair of diodes in the level shifter, to provide a net current to the current mirror.